

REMARKS

Claims 1-5 and 7-14 are all the claims pending in the application. No amendments are made to the claims herein.

I. Information Disclosure Statement

Applicants note that an Information Disclosure Statement was filed on July 29, 2003, in the above-identified application. Applicants respectfully request formal acknowledgement and consideration thereof, by way of return of an initialed copy of the PTO/SB/08 A & B (modified) Form filed therewith.

II. Drawings

Applicants note the Examiner's formal acknowledgement of the corrected/formal drawings filed on May 13, 2003.

III. Request for Withdrawal of the Finality of the Office Action dated August 1, 2003

Applicants respectfully submit that the Office Action dated August 1, 2003, was improperly made final and therefore Applicants request the Examiner to withdraw finality of the Office Action. The Examiner states on page 4 of the Office Action that Applicants' amendment necessitated the new grounds of rejection presented in the Office Action.

Applicants note that claim 1 was amended by incorporating the subject matter of original claim 6 and claim 6 was canceled. Applicants submit that under such circumstances, it is not proper for the Examiner to make the next Office Action relying on newly cited art final unless amendments were made to the claims, which necessitated application of the art submitted. In

this case the only substantive amendment to the claims was made by incorporating subject matter that was recited in the original claims and the disclosure and did not necessitate the application of the newly cited reference. See MPEP § 706.07(a). Specifically, it states in the MPEP:

A second or subsequent action on the merits in any application or patent involved in reexamination proceedings should not be made final if it includes a rejection, on prior art not of record, of any claim amended to include limitations which should reasonably have been expected to be claimed. See MPEP § 904 *et seq.*

Thus, since the amendments to claim 1 merely incorporated the subject matter of original independent claim 6, which should have at least been anticipated by the Examiner as part of the claimed invention, it is improper to make a final rejection wherein a new rejection is made over prior art not of record. Further, the incorporation of the subject matter of claim 6 into claim 1 did not affect the scope of the claims such that the newly cited Li et al reference could not have been applied in the first Office Action. (See MPEP § 904 which states “[t]he first search should cover the invention as described and claimed, including the inventive concepts toward which the claims appear to be directed” and MPEP § 904.03, which states, “. . .the search should, insofar as possible, also cover all subject matter which the examiner reasonably anticipates might be incorporated into applicants’ amendment.”)

In addition, it is improper to make a final rejection based on newly cited art, that was not submitted as part of an Information Disclosure Statement filed with a fee, of any claim that was not amended despite the fact that other claims may have been amended to require newly cited art. MPEP § 706.07(a). In this regard Applicants point out that dependent claim 13 specifically relates to the subject matter incorporated into claim 1 in the Amendment filed on May 13, 2003, but was not

amended. Thus, even if the amendment of claim 1 to include the subject matter of claim 6 is considered as an amendment necessitating the new grounds of rejection (a point which Applicants do not concede), it is improper to make the rejection final since 13 is included in the rejection over Li et al, but was not amended.

Accordingly, Applicants respectfully request withdrawal of the finality of the Office Action dated August 1, 2003, in view of the above.

IV. Response to Rejections Under 35 U.S.C. § 102

Claims 1-5 and 7-14 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Li et al (US Pub. No. 2002/0160113).

Referring to Figure 3 and paragraph [0028] of Li et al , the Examiner states that Li et al discloses a method of forming a film comprising the steps of (a starting a supply of a reacting gas at a first flow rate into a chamber in which a plasma is formed, such that an initial film is formed on a substrate via a first nozzle provided on the chamber above the center region of the substrate and (b) starting a supply of the reaction gas at a second flow rate into the chamber in which plasma is formed, after the step (a) , while the supply of the reaction gas at the first flow rate continues such that a film is formed on the initial film.

Applicants respectfully traverse the rejection and submit that Li et al does not disclose or teach or suggest supplying the supply gas into a central portion prior to supplying the reaction gas into a peripheral portion as in the presently claimed invention. In the present invention the introduction of the timing of the reaction gas is very important and therefore the present invention is distinguished over Li et al and is not anticipated.

Li et al merely suggests that the composition of the gas may be changed to form a film having a uniform thickness as shown in Fig. 2 and compared to a conventional example in Fig. 1. In the present invention, it is intended that a portion of the film is formed in the central portion and subsequently the whole film is formed. As understood from the description in paragraph [006] and Fig. 1 of Li et al, it is suggested that the film is formed in the central portion to have a thin thickness and, in addition, the film is also formed on the peripheral region to have a thin thickness. This is quite different from the present invention.

In particular, Li et al neither teaches nor suggests step (a) of the claimed invention of starting a supply of the reaction gas at a first flow rate into a chamber in which a plasma is formed, *such that an initial film is formed on a center of a wafer via a first nozzle provided on the chamber above the center region of the wafer*. Li et al clearly discloses that the first gas distributor has orifices or other exits opening into the deposition chamber in a circumferential pattern spaced apart from and generally overlying the circumferential periphery of the support substrate and a second gas distributor, which is preferentially a center nozzle, which is spaced and positioned apart from and above the substrate surface. Page 2, paragraph [0012]. Further, on page 3, paragraph [0025], it is disclosed that process gases are introduced into the vacuum chamber in the region surrounding the substrate through two sets of nozzles 34 and 34a arranged in a ring-like pattern. The orifices 38 of the nozzles 34 and 34a are arranged above the periphery of the substrate support. It is further disclosed that a combination of SiF and oxygen gas are supplied from the first gas source through the orifices 38 of nozzles 34; silane (SiH_4) is delivered from a second gas source through nozzles 34a and silane or a mixture thereof is introduced from a third gas source through the center nozzle 56. Thus, the initial film is formed on the periphery of the wafer by the first and second set of nozzles 34

and 34a from the first and second gas sources and not *on a center region of the wafer via a first nozzle provided on the chamber above the center region of the wafer* as recited in claim 1. Further, Li et al does not disclose, teach or suggest the first step of forming a film from a center region of a wafer by supplying a reaction gas at a first flow rate as recited in independent claim 8. Claims 2-5 and 7 depend from claim 1 and are distinguished over Li et al for at least the same reason. Claims 9-14 depend from claim 8 and are distinguished over Li et al for at least the same reason.

Accordingly, Applicants respectfully request withdrawal of the rejection.

IV. Request for an Interview

Applicants respectfully request an interview with the Examiner to discuss the application. The Examiner is requested to contact the undersigned, Jennifer Hayes, at (202) 775-7533 to schedule an interview.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. Application No.: 09/832,093

Attorney Docket No.: Q64059

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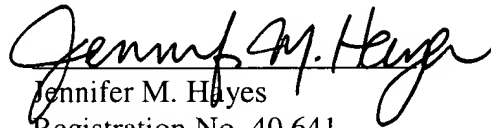
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CUSTOMER NUMBER

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Respectfully submitted,


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